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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,461	09/23/2003	Yoichiro Iwa	1715077	2345
24240	7590	07/21/2005	EXAMINER	
CHAPMAN AND CUTLER 111 WEST MONROE STREET CHICAGO, IL 60603			VANNUCCI, JAMES	
			ART UNIT	PAPER NUMBER
			2828	

DATE MAILED: 07/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/668,461	<b>Applicant(s)</b> IWA ET AL.	
	<b>Examiner</b> Jim Vannucci	<b>Art Unit</b> 2828	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2003.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10-17-03/12-23-04</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 4, 7, 10-11, 14-15 and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Graig et al.(6,356,574).

Claims 1 and 32, figure 16 discloses a light source unit(15) with a condensing optical system(21-1) for condensing a laser beam emitted from one semiconductor laser(15-1), another condensing optical system(21-2) for condensing a laser beam emitted from another semiconductor laser(15-2), and a focusing optical system(100) for focusing and projecting the laser beam condensed by the one condensing optical system(21-1) and the laser beam condensed by the another condensing optical system(21-2) onto an incident face of one light guiding means(18).

Claim 4, the condensing optical system(21) disclosed in figure 16 is a collimating lens system.

Claims 7 and 10, one condensing optical system(21-1) and another condensing optical system(21-x) are disposed in substantially symmetrical positions centralizing on an optical axis of the focusing optical system.

Claims 11 and 14-15, the light guiding means(18) disclosed in figure 16 is an optical fiber with an incident face disposed in a focal point of the focusing optical system.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-3, 5-6, 8-9, 12-13 and 16-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Craig in view of Rice et al.(6,229,940).

Claim 2, figure 2 of Rice discloses a focusing unit with one condensing optical system(not numbered) for condensing a laser beam emitted from an emission face of light guiding means(22) of one light source unit(18) from a plurality of light source units, another condensing optical system(not numbered) for condensing a laser beam emitted from an emission face of light guiding means(22) of another light source unit(18), and a focusing optical system(28) for focusing and projecting the laser beam condensed by the one condensing optical system and the laser beam condensed by the another condensing optical system onto an incident face of one light guiding means(26).

Claim 3, figure 3 of Rice discloses a combiner(20) that can include a plurality of focusing units and a condensing optical system as disclosed in figure 2 of Rice for respectively condensing a laser beam emitted from each emission face of each light guiding means(12a) in the plurality of focusing units, and a focusing optical system for focusing and projecting a laser beam which is focused after being condensed by the each condensing optical system onto an incident face of one light guiding means(22).

Claims 5-6, the condensing optical system disclosed in figure 16 of Craig is a collimating lens system(21).

Claims 8-9, the one condensing optical system(21-1) and the another condensing optical system(21-x) disclosed in figure 16 of Craig are disposed in substantially symmetrical positions centralizing on an optical axis of said focusing optical system.

Claims 12-13, the light guiding means(18) disclosed in figure 16 of Craig is an optical fiber with an incident face disposed at a focal point of the focusing optical system.

Claim 16, figures 2 and 3 of Rice disclose a light source unit(16) and a focusing unit(28) optically connected with inverted cascade.

Claims 17-23, Rice discloses laser beams generated by semiconductor lasers which are disposed in a light source unit having different wavelengths(col. 6, lines 5-10).

Claims 24-31, Rice discloses placing semiconductor lasers in a light source unit controlling them individually(col. 4, lines 7-10).

It would have been obvious to one of ordinary skill in the art at the time of the

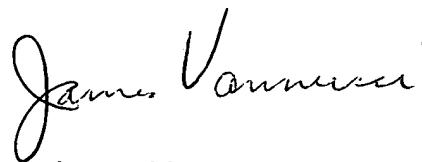
invention to use the optical elements disclosed in Rice with the device disclosed in Craig for improved scalability and output quality as disclosed in Rice(abstract).

***Correspondence***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Jim Vannucci whose phone number is (571) 272-1820.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center whose telephone number is (703) 308-0956.

Papers related to Technology Center 2800 applications only may be submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be considered an official response must be clearly marked "DRAFT". The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Technology Center Fax Center number is (571) 273-8300.

A handwritten signature in black ink that reads "James Vannucci". The signature is written in a cursive style with a large, stylized "J" and "V".

James Vannucci